IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): An encryption processing apparatus ~~for performing~~ configured to perform a data encryption process, said encryption processing apparatus comprising:

a control section ~~for setting~~ configured to set a mixed encryption processing sequence by dividing an original encryption processing sequence into a plurality of groups composed of one or more encryption processing units and by mixing processing sequences of encryption processing units under [[the]] a condition in which the processing sequence of the encryption processing units within each set group is fixed; and

an encryption processing section ~~for performing~~ configured to perform an encryption process in accordance with the mixed encryption processing sequence set by said control section,

wherein the original encryption processing sequence to be mixed is an encryption processing sequence including a triple-DES encryption process, and

said control section is configured to set a dummy single-DES process as a dummy encryption process that is unnecessary for the original encryption processing sequence in at least one of said groups of divisions, and set the number of dummy single-DES processes to be a multiple of 3 corresponding to the triple DES encryption process.

Claim 2 (Currently Amended): An encryption processing apparatus according to Claim 1, wherein said control section ~~sets~~ is configured to set a dummy encryption processing unit ~~for performing a~~ that performs the dummy encryption process ~~unnecessary for said original encryption processing sequence in at least one of said groups of divisions~~,

and ~~sets~~ set one mixed encryption processing sequence by mixing the encryption processing units of a plurality of groups containing the dummy encryption processing unit.

Claim 3 (Currently Amended): An encryption processing apparatus according to Claim 1, wherein said control section ~~determines~~ is configured to determine a group of sequences, which can be performed independently of each other, within the original encryption processing sequence to be divided in a process of division into a plurality of groups composed of one or more encryption processing units, and ~~performs~~ perform a process for setting a group of divisions in which the sequence which can be performed independently is a unit.

Claim 4 (Currently Amended): An encryption processing apparatus according to Claim 1, wherein said encryption processing unit is a single-DES encryption process, and

wherein said control section ~~sets~~ is configured to set one mixed encryption processing sequence by dividing the original encryption processing sequence containing one or more single-DES encryption processes into a plurality of groups composed of one or more single-DES encryption processes and by mixing the single-DES encryption processing units contained in each group of divisions by mutual replacement of the single-DES encryption processing unit of each set group under the condition in which the processing sequence within each set group is fixed.

Claim 5 (Currently Amended): An encryption processing apparatus according to Claim 1, wherein ~~the original encryption processing sequence to be mixed is an encryption processing sequence including a triple-DES encryption process, and~~ said control section ~~performs~~ is configured to perform a process for dividing the encryption processing sequence

into a plurality of groups composed of one or more encryption processing units by using [[the]] a single-DES encryption process which forms the triple-DES encryption process as an encryption processing unit.

Claim 6 (Currently Amended): An encryption processing apparatus according to Claim 1, wherein the original encryption processing sequence to be mixed is an encryption processing sequence including ~~a triple-DES encryption process and~~ a random-number generation process, and

said control section ~~forms~~ is configured to form a random-number generation process as a process including a conversion process by three single-DES processes, and sets the triple-DES encryption process as a random-number generation process in one of the groups of divisions.

Claim 7 (Canceled).

Claim 8 (Currently Amended): An encryption processing apparatus according to Claim 1, wherein said encryption processing apparatus has a memory for storing processing results of the encryption processing units which form the mixed encryption processing sequence set by said control section, and

said control section ~~stores~~ is configured to store the processing results in said memory in such a manner as to be capable of identifying which encryption processing unit the processing results are obtained from.

Claim 9 (Currently Amended): An encryption processing apparatus ~~for performing~~ configured to perform a data encryption process, said encryption processing apparatus comprising:

a control section ~~for setting~~ configured to set a mixed encryption processing sequence by dividing the original encryption processing sequence into one or more encryption processing units, by adding a dummy encryption processing unit ~~for performing~~ that performs ~~a process~~ a dummy single-DES process as a dummy encryption process that is unnecessary for the original encryption processing sequence and that corresponds ~~corresponding~~ to said encryption processing unit, and by performing a mixing of processing sequences of the original encryption processing units included in the original encryption processing sequence and said dummy encryption processing units; and

an encryption processing section ~~for performing~~ configured to perform an encryption process in accordance with the mixed encryption processing sequence set by said control section,

wherein the original encryption processing sequence to be mixed is an encryption processing sequence including a triple-DES encryption process, and

said control section is configured to set the number of dummy single-DES processes to a multiple of 3 corresponding to the triple DES encryption process.

Claim 10 (Currently Amended): An encryption processing apparatus according to Claim 9, wherein the encryption processing unit contained in said original encryption processing sequence is a single-DES encryption process, and

said control section ~~sets~~ is configured to set said dummy encryption processing unit as a single-DES encryption process.

Claim 11 (Currently Amended): An encryption processing method for performing a data encryption process, said encryption processing method comprising:

~~a division step of~~ dividing an original encryption processing sequence into a plurality of groups composed of one or more encryption processing units;

~~a mixed encryption processing sequence setting step of~~ setting a mixed encryption processing sequence by mixing processing sequences of encryption processing units under [[the]] a condition in which the processing sequence of the encryption processing units, set in said dividing ~~division step~~, within each group is fixed; and

~~an encryption processing step of~~ performing an encryption process in accordance with the mixed encryption processing sequence set in said ~~mixed encryption processing sequence~~ setting ~~step~~,

wherein the original encryption processing sequence to be mixed is an encryption processing sequence including a triple-DES encryption process, and

said dividing includes setting a dummy single-DES process as a dummy encryption process that is unnecessary for the original encryption processing sequence in at least one of said groups, and setting the number of single-DES processes of dummies to be set to a multiple of 3 corresponding to the triple-DES encryption process.

Claim 12 (Currently Amended): An encryption processing method according to Claim 11, further comprising ~~the step of~~ setting a dummy encryption processing unit ~~for performing a~~ that performs the dummy encryption process ~~unnecessary for said original encryption processing sequence in at least one of said groups of divisions~~, and

~~said mixed encryption processing sequence setting step sets~~ setting one mixed encryption processing sequence by mixing the encryption processing units of a plurality of groups containing said dummy encryption processing units.

Claim 13 (Currently Amended): An encryption processing method according to Claim 11, wherein said ~~division step~~ dividing determines a group of sequences, which can be performed independently of each other, within the original encryption processing sequence to be divided in a process of division into a plurality of groups composed of one or more encryption processing units, and performs a process for setting a group of divisions in which the sequence which can be performed independently is a unit.

Claim 14 (Currently Amended): An encryption processing method according to Claim 11, wherein said encryption processing unit is a single-DES encryption process,

said ~~division step~~ dividing divides the original encryption processing sequence containing one or more single-DES encryption processes into a plurality of groups composed of one or more single-DES encryption processes, and

said ~~mixed encryption processing sequence setting step~~ setting sets one mixed encryption processing sequence by mixing the single-DES encryption processing units contained in each group of divisions by mutual replacement of the single-DES encryption processing units of each set group under the condition in which the processing sequence within each set group is fixed.

Claim 15 (Currently Amended): An encryption processing method according to Claim 11, wherein ~~the original encryption processing sequence to be mixed is an encryption processing sequence including a triple-DES encryption process, and~~

said ~~division step~~ dividing performs a process for dividing the encryption processing sequence into a plurality of groups composed of one or more encryption processing units with

[[the]] a single-DES encryption process which forms the triple-DES encryption process being an encryption processing unit.

Claim 16 (Currently Amended): An encryption processing method according to Claim 11, wherein the original encryption processing sequence to be mixed is an encryption processing sequence including ~~a triple-DES encryption process and~~ a random-number generation process, and

said encryption processing method further comprises ~~the steps of~~ forming a random-number generation process as a process including a conversion process by three single-DES processes and setting the triple-DES encryption process as a random-number generation process in one of the groups of divisions.

Claim 17 (Canceled).

Claim 18 (Currently Amended): An encryption processing method according to Claim 11, ~~wherein said encryption processing step includes a step of~~ further comprising:

storing processing results in a memory for storing processing results of the encryption processing units which form the mixed encryption processing sequence in such a manner as to be capable of identifying which encryption processing unit the processing results are obtained from.

Claim 19 (Currently Amended): An encryption processing method for performing a data encryption process, said encryption processing method comprising:

~~a division step of~~ dividing an original encryption processing sequence into one or more encryption processing units;

~~a mixed encryption processing sequence setting step of~~ setting a mixed encryption processing sequence by adding a dummy encryption processing unit ~~for performing a process~~ that performs a dummy-single DES process as a dummy encryption process that is unnecessary for the original processing sequence and that corresponds ~~corresponding~~ to said encryption processing unit and by mixing processing sequences of the original encryption processing units included in the original encryption processing sequence and said dummy encryption processing units; and

~~an encryption processing step of~~ performing an encryption process in accordance with said mixed encryption processing sequence,

wherein the original encryption processing sequence to be mixed is an encryption processing sequence including a triple-DES encryption process, and

said dividing includes setting the number of dummy single-DES processes to a multiple of 3 corresponding to the triple-DES encryption process.

Claim 20 (Currently Amended): An encryption processing method according to Claim 19, wherein the encryption processing unit contained in said original encryption processing sequence is a single-DES encryption process, and

said ~~mixed encryption processing sequence setting step~~ setting sets said dummy encryption processing unit as a single-DES encryption process.

Claim 21 (Currently Amended): ~~A computer program written to perform encryption processing on a computer system, said computer program~~ A computer readable storage medium encoded with computer executable instructions, which when executed by a computer, cause the computer to perform a method comprising:

~~a division step of~~ dividing an original encryption processing sequence into a plurality of groups composed of one or more encryption processing units;

~~a mixed encryption processing sequence setting step of~~ setting a mixed encryption processing sequence by mixing processing sequences of encryption processing units under [[the]] a condition in which the processing sequence of the encryption processing units, set in said dividing ~~division step~~, within each group is fixed; and

~~an encryption processing step of~~ performing an encryption process in accordance with the mixed encryption processing sequence set in said ~~mixed encryption processing sequence~~ setting ~~step~~,

wherein the original encryption processing sequence to be mixed is an encryption processing sequence including a triple-DES encryption process, and

said dividing includes setting a dummy single-DES process as a dummy encryption process that is unnecessary for the original encryption processing sequence in at least one of said groups, and setting the number of single-DES processes of dummies to be set to a multiple of 3 corresponding to the triple-DES encryption process.

Claim 22 (Currently Amended): ~~A computer program written to perform encryption processing on a computer system, said computer program~~ A computer readable storage medium encoded with computer executable instructions, which when executed by a computer, cause the computer to perform a method comprising:

~~a division step of~~ dividing an original encryption processing sequence into one or more encryption processing units;

~~a mixed encryption processing sequence setting step of~~ setting a mixed encryption processing sequence by adding a dummy encryption processing unit ~~for performing a process~~ that performs a dummy-single DES process as a dummy encryption process that is

unnecessary for the original processing sequence and that corresponds ~~corresponding~~ to said encryption processing unit and by mixing processing sequences of the original encryption processing units included in the original encryption processing sequence and said dummy encryption processing units; and

~~an encryption processing step of~~ performing an encryption process in accordance with said mixed encryption processing sequence,

wherein the original encryption processing sequence to be mixed is an encryption processing sequence including a triple-DES encryption process, and

said dividing includes setting the number of dummy single-DES processes to a multiple of 3 corresponding to the triple-DES encryption process.